

* * * * * Welcome to STN International * * * * *

| | | | | |
|------|---------|-----|-------|---|
| NEWS | 1 | | | Web Page for STN Seminar Schedule - N. America |
| NEWS | 2 | DEC | 01 | ChemPort single article sales feature unavailable |
| NEWS | 3 | APR | 03 | CAS coverage of exemplified prophetic substances enhanced |
| NEWS | 4 | APR | 07 | STN is raising the limits on saved answers |
| NEWS | 5 | APR | 24 | CA/CAPLUS now has more comprehensive patent assignee information |
| NEWS | 6 | APR | 26 | USPATFULL and USPAT2 enhanced with patent assignment/reassignment information |
| NEWS | 7 | APR | 28 | CAS patent authority coverage expanded |
| NEWS | 8 | APR | 28 | ENCOMPLIT/ENCOMPLIT2 search fields enhanced |
| NEWS | 9 | APR | 28 | Limits doubled for structure searching in CAS REGISTRY |
| NEWS | 10 | MAY | 08 | STN Express, Version 8.4, now available |
| NEWS | 11 | MAY | 11 | STN on the Web enhanced |
| NEWS | 12 | MAY | 11 | BEILSTEIN substance information now available on STN Easy |
| NEWS | 13 | MAY | 14 | DGENE, PCTGEN and USGENE enhanced with increased limits for exact sequence match searches and introduction of free HIT display format |
| NEWS | 14 | MAY | 15 | INPADOCDB and INPAFAMDB enhanced with Chinese legal status data |
| NEWS | 15 | MAY | 28 | CAS databases on STN enhanced with NANO super role in records back to 1992 |
| NEWS | 16 | JUN | 01 | CAS REGISTRY Source of Registration (SR) searching enhanced on STN |
| NEWS | 17 | JUN | 26 | NUTRACEUT and PHARMAML no longer updated |
| NEWS | 18 | JUN | 29 | IMSCOPROFILE now reloaded monthly |
| NEWS | 19 | JUN | 29 | EPFULL adds SLART to AB, MCLM, and TI fields |
| NEWS | EXPRESS | MAY | 26 09 | CURRENT WINDOWS VERSION IS V8.4, AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009. |
| NEWS | HOURS | | | STN Operating Hours Plus Help Desk Availability |
| NEWS | LOGIN | | | Welcome Banner and News Items |

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 11:33:37 ON 01 JUL 2009

| | | |
|----------------------|------------|---------|
| => file reg | | |
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.22 | 0.22 |

FILE 'REGISTRY' ENTERED AT 11:33:57 ON 01 JUL 2009
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STRUCTURE FILE UPDATES: 30 JUN 2009 HIGHEST RN 1160555-05-4
DICTIONARY FILE UPDATES: 30 JUN 2009 HIGHEST RN 1160555-05-4

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

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<http://www.cas.org/support/stngen/stdoc/properties.html>

=>

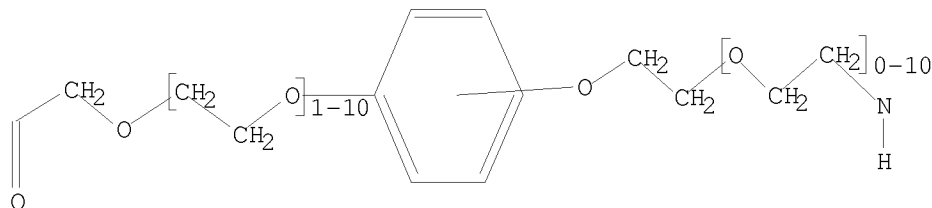
Uploading C:\Program Files\Stnexp\Queries\11573868-Ib.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 11:34:18 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 5144 TO ITERATE

38.9% PROCESSED 2000 ITERATIONS 0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 98579 TO 107181

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 full

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100.0% PROCESSED 101816 ITERATIONS

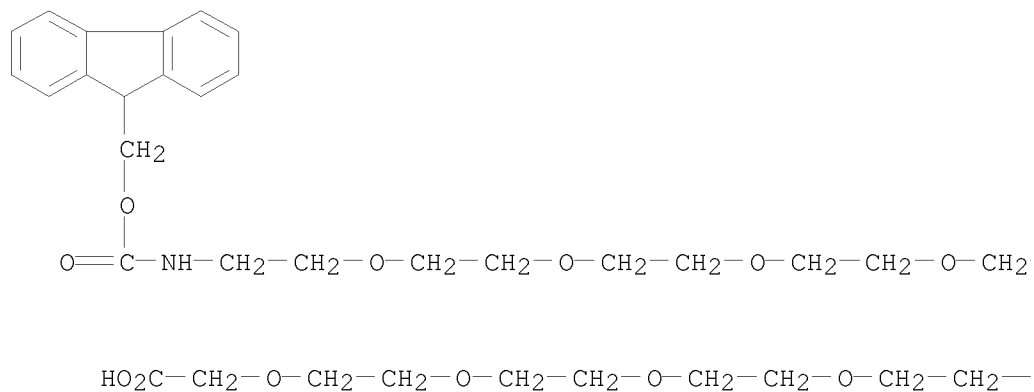
6 ANSWERS

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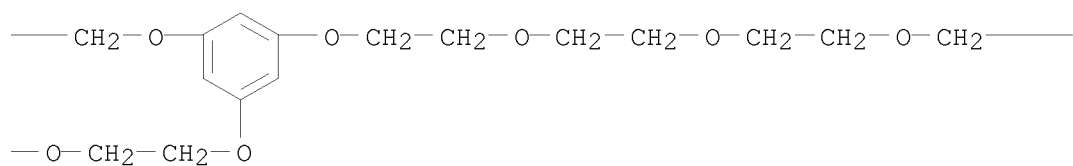
6 SEA SSS FUL L1

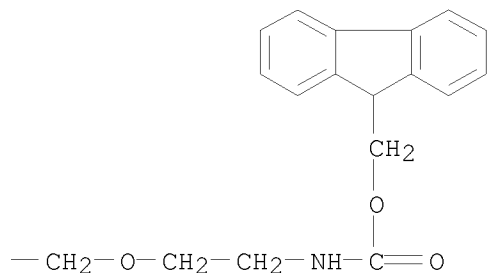
L3 6 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN 5,8,11,14-Tetraoxa-2-azahexadecanoic acid,
16-[3-[(16-carboxy-3,6,9,12,15-pentaoxahexadec-1-yl)oxy]-5-[[18-(9H-
fluoren-9-yl)-16-oxo-3,6,9,12,17-pentaoxa-15-azaoctadec-1-yl]oxy]phenoxy]-
1-(9H-fluoren-9-ylmethyl) ester
MF C68 H90 N2 O22

PAGE 1-A



PAGE 1-B





PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):file caplus
'FILE CAPLUS' IS NOT VALID HERE

To display more answers, enter the number of answers you would like to see. To end the display, enter "NONE", "N", "0", or "END".
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

| | | |
|----------------------|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 186.36 | 186.58 |

FILE 'CAPLUS' ENTERED AT 11:34:52 ON 01 JUL 2009
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FILE COVERS 1907 - 1 Jul 2009 VOL 151 ISS 1
FILE LAST UPDATED: 30 Jun 2009 (20090630/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2009

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 3 L3

=> d l4 ibib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:406941 CAPLUS

DOCUMENT NUMBER: 141:273853

TITLE: Design and synthesis of novel hydrophilic spacers for the reduction of nonspecific binding proteins on affinity resins

AUTHOR(S): Shiyama, Takaaki; Furuya, Minoru; Yamazaki, Akira; Terada, Tomohiro; Tanaka, Akito

CORPORATE SOURCE: Chemistry Department, Reverse Proteomics Research Institute Co., Ltd, Chiba, 292-0818, Japan

SOURCE: Bioorganic & Medicinal Chemistry (2004), 12(11), 2831-2841

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:273853

AB Tubulin and actin often bind nonspecifically to affinity chromatog. resins, complicating research toward identifying the cellular targets. Reduction of nonspecific binding proteins is important for success in finding such targets. We herein disclose the design, synthesis, and effectiveness in reduction of nonspecific binding proteins, of novel hydrophilic spacers (2-5), which were introduced between matrixes and a ligand. Among them, tartaric acid derivative (5) exhibited the most effective reduction of

nonspecific

binding proteins, while maintaining binding of the target protein.

Introduction of 5 on TOYOPEARL reduced tubulin and actin by almost 65% and 90% compared to that without the hydrophilic spacer, resp., with effective binding to the target protein, FKBP12.

IT 675606-56-1P 675606-57-2P 675606-58-3P

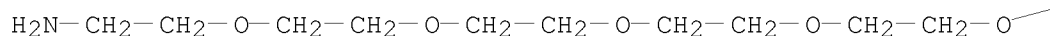
RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)

(design and synthesis of novel hydrophilic spacers for reduction of nonspecific binding proteins on affinity resins)

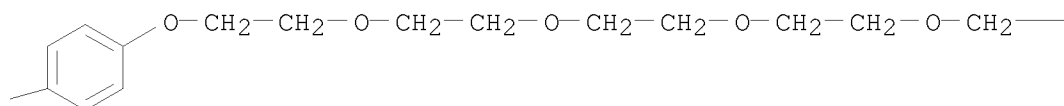
RN 675606-56-1 CAPLUS

CN 3,6,9,12,15-Pentaoxaheptadecanoic acid, 17-[4-[(14-amino-3,6,9,12-tetraoxatetradec-1-yl)oxy]phenoxy]-, 1,1-dimethylethyl ester (CA INDEX NAME)

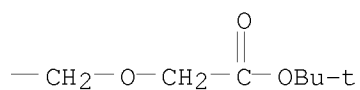
PAGE 1-A



PAGE 1-B



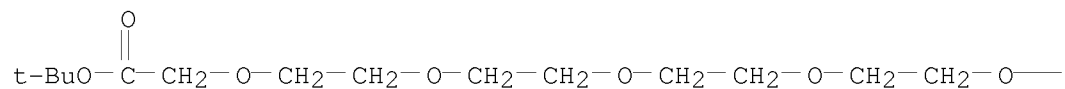
PAGE 1-C



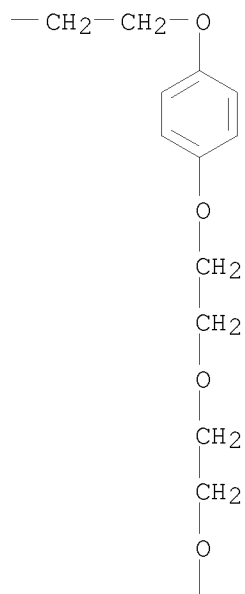
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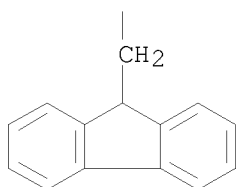
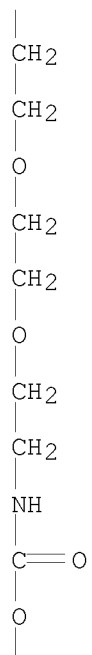
CN 3,6,9,12,15-Pentaoxaheptadecanoic acid,
17-[4-[[18-(9H-fluoren-9-yl)-16-oxo-3,6,9,12,17-pentaoxa-15-azaoctadec-1-yl]oxy]phenoxy]-, 1,1-dimethylethyl ester (CA INDEX NAME)

PAGE 1-A

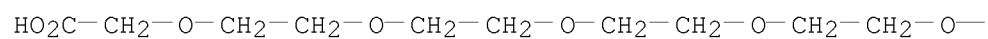


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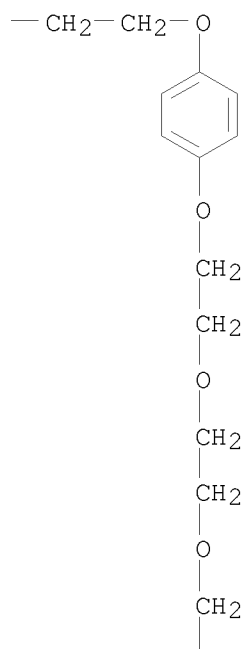




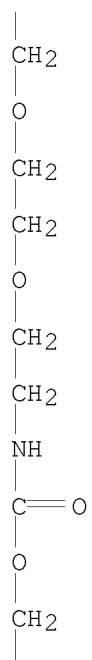
RN 675606-58-3 CAPLUS
 CN 5,8,11,14-Tetraoxa-2-azahexadecanoic acid,
 16-[4-[(16-carboxy-3,6,9,12,15-pentaoxahexadec-1-yl)oxy]phenoxy]-,
 1-(9H-fluoren-9-ylmethyl) ester (CA INDEX NAME)



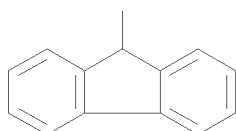
PAGE 1-B



PAGE 2-B



PAGE 3-B



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:252751 CAPLUS

DOCUMENT NUMBER: 140:283950

TITLE: Synthesis of hydrophilic spacers that can reduce nonspecific adsorption of molecules to the surface of solid phase matrix and application to preparation of affinity ligand-immobilized matrixes

INVENTOR(S): Tanaka, Akito; Terada, Tomohiro; Tamura, Tsurunori; Ichiyama, Takaaki; Yamazaki, Akira; Furuya, Minoru; Haramura, Masayuki

PATENT ASSIGNEE(S): Reverse Proteomics Research Institute Co., Ltd., Japan; Fujisawa Pharmaceutical Co., Ltd.

SOURCE: PCT Int. Appl., 134 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2004025297 | A1 | 20040325 | WO 2003-JP9640 | 20030730 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003254782 | A1 | 20040430 | AU 2003-254782 | 20030730 |
| EP 1553412 | A1 | 20050713 | EP 2003-795206 | 20030730 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| US 20060177943 | A1 | 20060810 | US 2006-522716 | 20060120 |
| PRIORITY APPLN. INFO.: | | | JP 2002-222226 | A 20020730 |
| | | | WO 2003-JP9640 | W 20030730 |

OTHER SOURCE(S): MARPAT 140:283950

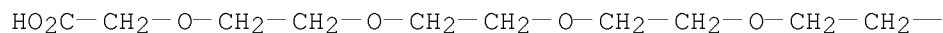
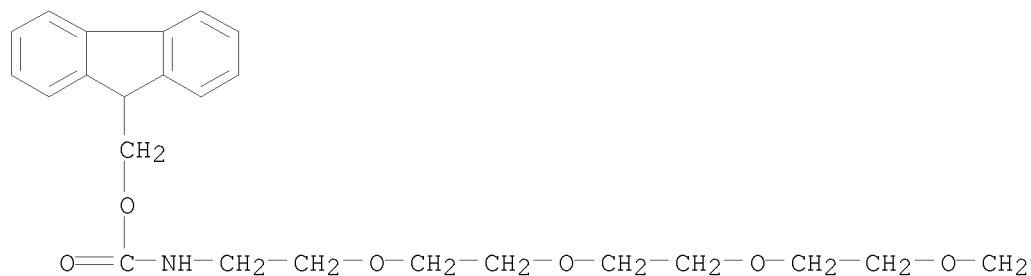
AB Chemical modification method for reducing nonspecific adsorption of mols. to the surface of solid phase matrixes in order to promote specific interaction of immobilized mols. with the target partner mols. The strategy includes the controlling the hydrophobicity of the surface by introducing hydrophilic spacers. These hydrophilic spacers are designed to have ≥ 6 hydrogen bond acceptors, ≥ 5 hydrogen bond donors and their sum are ≥ 9 , ≥ 1 carbonyl group, no charged groups. The specific structures for the hydrophilic spacers with reactive carbonyl and amino groups have been designed and synthesized. The hydrophilic spacers have the structures of polyols containing methylenes with linear or branched alkyl group of 1.apprx.3 carbon or $-CH_2OH$, the two or three polyethylene glycol chains (1 .apprx. 1000 EG units) linked to phenol derivs., and alkyl chain (C: n = 1 .apprx. 10) linked with 1 .apprx. 10 unit(s) of $(-O-C(R_1, R_2)C(R_3, R_4)-)$ (R_1-R_4 : linear or branched alkyl of 1.apprx.3 carbon). The matrixes with these spacers can be used for immobilization of various sizes of ligands (low or high mol. weight) and for analyses of their interaction with the target partner mols. of various mol. sizes. The applications of some hydrophilic spacers to immobilization of affinity ligands such as FK506 to TOYO-pearl AF-amino resin or gold-film matrixes and detection of FKBP12 protein in rat brain

IT 675606-75-4P

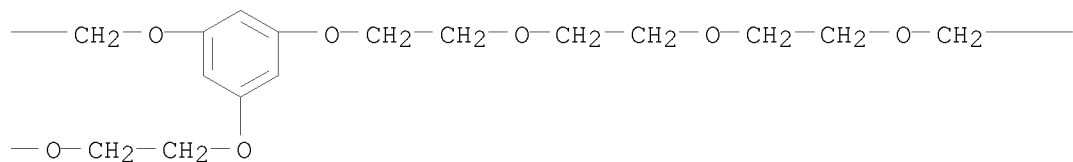
(potential use as hydrophilic spacer; synthesis of hydrophilic spacers that can reduce nonspecific adsorption of mols. to surface of solid phase matrix and application to preparation of affinity ligand-immobilized matrixes)

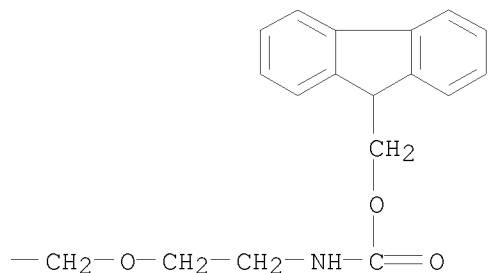
RN 675606-75-4 CAPLUS

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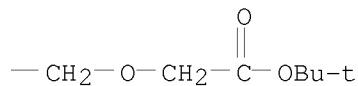
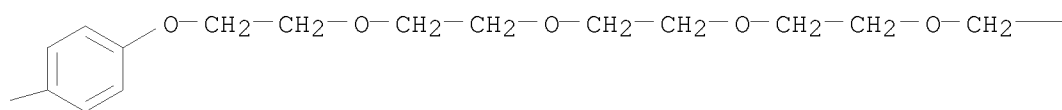
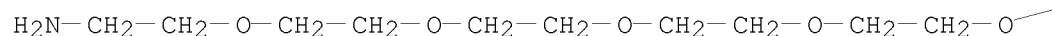


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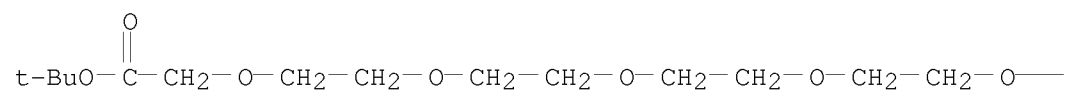


IT 675606-56-1P 675606-57-2P 675606-74-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (synthesis of hydrophilic spacers that can reduce nonspecific
 adsorption of mols. to surface of solid phase matrix and application to
 preparation of affinity ligand-immobilized matrixes)
 RN 675606-56-1 CAPLUS
 CN 3,6,9,12,15-Pentaoxaheptadecanoic acid,
 17-[4-[(14-amino-3,6,9,12-tetraoxatetradec-1-yl)oxy]phenoxy]-,
 1,1-dimethylethyl ester (CA INDEX NAME)

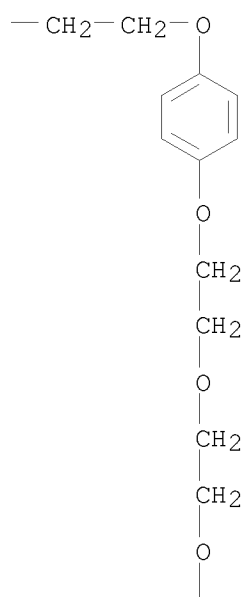


RN 675606-57-2 CAPLUS
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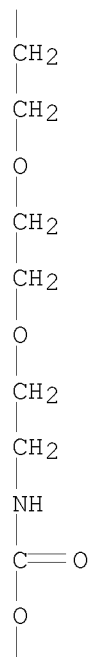
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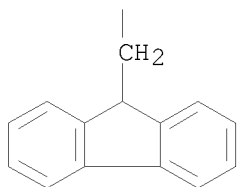


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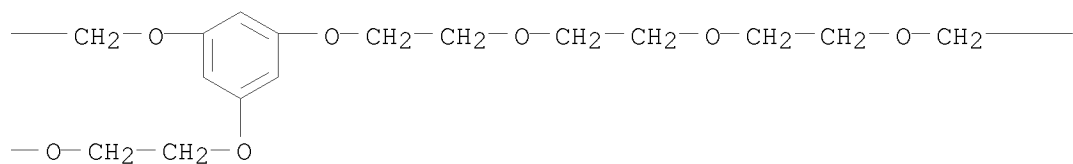
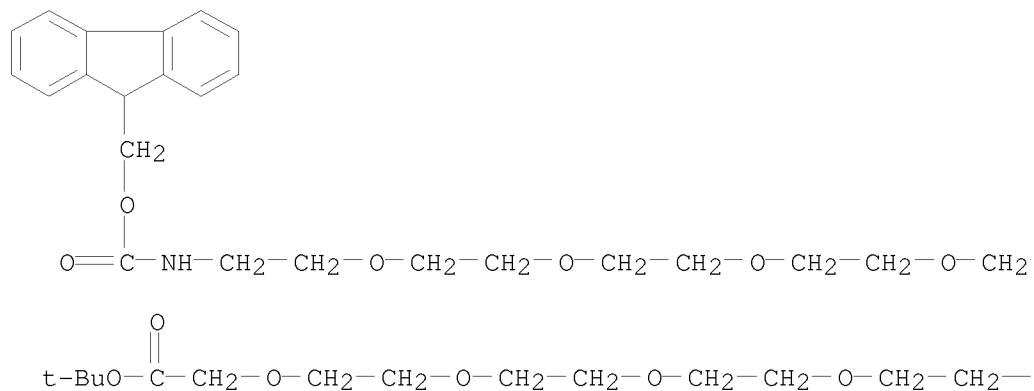


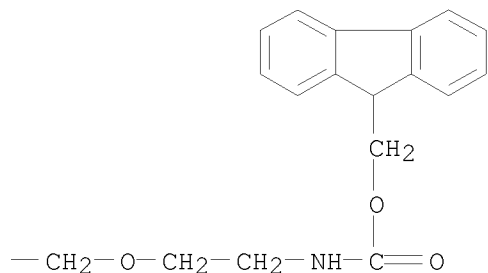
PAGE 2-B





RN 675606-74-3 CAPLUS
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 16-[3-[(19,19-dimethyl-17-oxo-3,6,9,12,15,18-hexaoxaeicos-1-yl)oxy]-5-[[18-(9H-fluoren-9-yl)-16-oxo-3,6,9,12,17-pentaoxa-15-azaoctadec-1-yl]oxy]phenoxy]-, 9H-fluoren-9-ylmethyl ester (CA INDEX NAME)





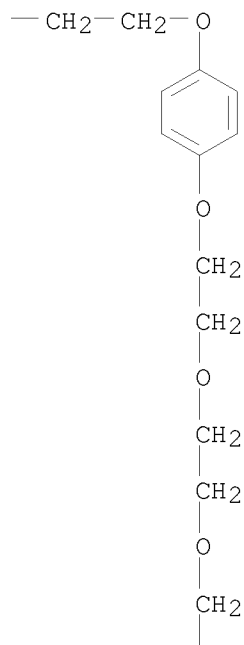
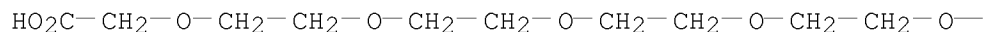
IT 675606-58-3P

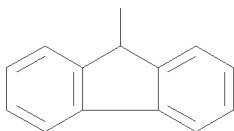
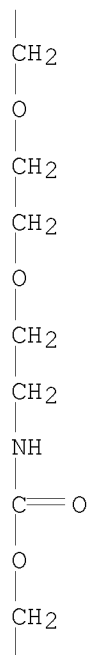
RL: BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(used as hydrophilic spacer, linked to TOYO-Pearl resin; synthesis of hydrophilic spacers that can reduce nonspecific adsorption of mols. to surface of solid phase matrix and application to preparation of affinity ligand-immobilized matrixes)

RN 675606-58-3 CAPLUS

CN 5,8,11,14-Tetraoxa-2-azahexadecanoic acid,
16-[4-[(16-carboxy-3,6,9,12,15-pentaoxa-hexadec-1-yl)oxy]phenoxy]-,
1-(9H-fluoren-9-ylmethyl) ester (CA INDEX NAME)





REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:516284 CAPLUS

DOCUMENT NUMBER: 125:247294

ORIGINAL REFERENCE NO.: 125:46221a, 46224a

TITLE: Syntheses of ligands containing two and three 2,2'-(bisamino)diphenyl ether units designed for molecular self-assembly on lithiation

AUTHOR(S): Ashton, Peter R.; Hoerner, Bernd; Kocian, Oldrich; Menzer, Stephan; White, Andrew J. P.; Stoddart, J. Fraser; Williams, David J.

CORPORATE SOURCE: School Chem., Univ. Birmingham, Birmingham, B15 2TT, UK

SOURCE: Synthesis (1996), (8), 930-940
CODEN: SYNTBF; ISSN: 0039-7881

PUBLISHER: Thieme

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The syntheses of polyamines containing 2-3 2,2'-(bisamino)diphenyl ether units linked together, designed for self-assembly following lithiation, are reported. The x-ray crystal structures of 2 of the bis[2,2-(bisamino)diphenyl ethers] are described. The ligand, which is linked by an ethylene glycol spacer, exhibits a coiled conformation by intramol. H bonds and supplemented by [CH- π] interactions. The ligand, which is linked by a more rigid bridge, containing a paraphenylene unit,

displays a stretched conformation stabilized by intramol. edge to face interactions.

IT 181725-62-2P

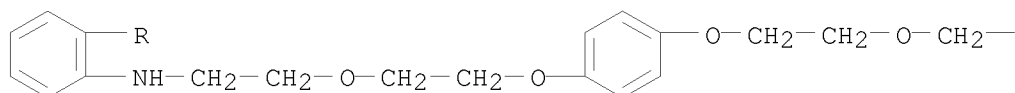
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of ligands with (bisamino)diphenyl ether units)

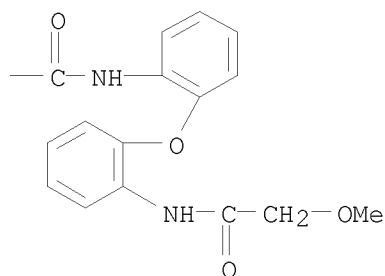
RN 181725-62-2 CAPLUS

CN Acetamide, 2,2'-[oxybis(2,1-phenyleneimino-2,1-ethanediylloxy-2,1-ethanediylloxy-4,1-phenyleneoxy-2,1-ethanediylloxy)]bis[N-[2-[2-[(methoxyacetyl)amino]phenoxy]phenyl]- (9CI) (CA INDEX NAME)

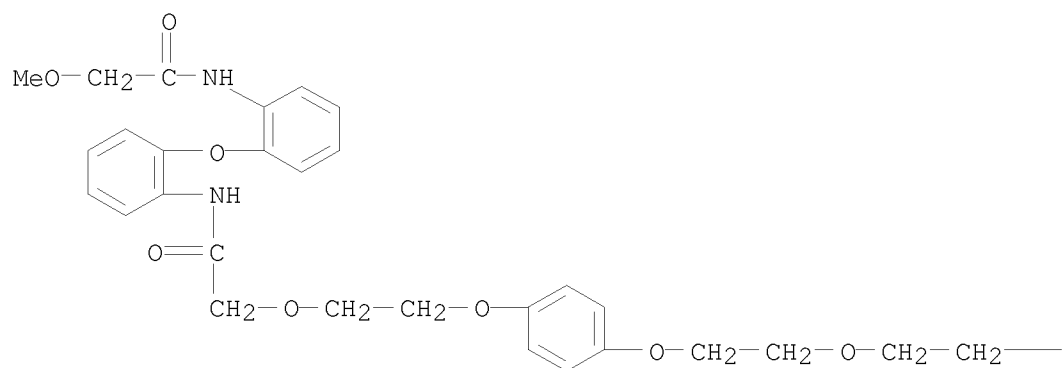
PAGE 1-A



PAGE 1-B



PAGE 2-A



R—O—

